

# Exploring Teenagers Shoplifting Motivations and Perceptions of Deterrence Measures – A Case Study of Mauritius

**G. Prayag\***

*Faculty of Law & Management,  
University of Mauritius  
Email: [gp19@waikato.ac.nz](mailto:gp19@waikato.ac.nz)*

**T. D. Juwaheer**

*Faculty of Law & Management,  
University of Mauritius  
Email: [roubina@uom.ac.mu](mailto:roubina@uom.ac.mu)*

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## **Abstract**

Shoplifting has been explored using different perspectives such as law and criminology, psychology and more recently consumer behaviour. From a marketing perspective, sporadic attempts have been made to understand consumers' motives and their perceptions of deterrence measures in the context of a small island. Building on this knowledge gap, the study explores these aspects with particular reference to the teenage market. Gender and age are used as discriminating variables to understand motivations, attitudes and behaviour towards shoplifting. A mixed methodology with a priori ten in-depth interviews with managers and owners of retail stores enabled the construction of a structured questionnaire administered to a sample of 400 teenagers. Factor analysis revealed the existence of eight different motives for shoplifting. For example, a social motive captures peer influence on shoplifting while the experiential motive encapsulates the attraction to novelty or risk of the experience. Almost half (46%) of the sample claimed they had at least one shoplifting experience and in most cases deterrence measures were perceived as effective. Tests of association revealed that age and gender had some influence on motives for shoplifting.

**Keywords:** shoplifting, consumer behaviour, teenage market, deterrence measures, Mauritius

*\*For correspondences and reprints*

## INTRODUCTION

Shoplifting has been described as a minor and non-violent crime but with significant economic and social implications. Different studies have sought to identify the impact and consequences of shoplifting by using various theoretical bases derived from fields such as law and criminology (McShane & Noonan, 1993; Deng, 1997), sociology (Cox *et al.*, 1993; Forney *et al.*, 2006), psychology (Moore, 1983; Kallis & Vanier, 1985; Klemke, 1992) and consumer behaviour (Lin *et al.*, 1994; Fullerton & Punj, 1997a,b; Tonglet, 2002). From a marketing perspective, shoplifting is one of the most troubling and least understood aspects of consumer behaviour (Cox *et al.*, 1990) and most studies foci have been based or carried out on developed countries such as UK and USA (Fullerton & Punj, 1997a). This ‘dark, feral side of the consumer’ (Fullerton & Punj, 1997a), is thought to be more prominent in developing countries, where poverty, lack of education, and under-developed infrastructure for retail stores, exacerbate shoplifting. However, the focus of this study is not exclusively on economic factors but it also considers personal and social causes of shoplifting from a consumer behaviour perspective.

Some evidence of the magnitude of the problem exists but often lack of official reliable and up-to-date figures since shoplifting is being accounted as part of larceny, it makes such estimates impossible. For example, Lo *et al.* (2001) reported shoplifting by consumers and employees as a major area of concern for Chinese retailers, compounded by organised crime in supermarkets. Similarly, the South African retail scene is facing an unending challenge of shoplifting and mall crime (Cant & Brink, 1999). So far, no study has been carried out on this aberrant behaviour in a small developing island context. As with many developing countries, official figures on shoplifting are unavailable due to such crime being tabulated as part of larceny figures. The Mauritius Crime Survey Report (2004) indicates 14, 335 cases of larceny (all categories included) but no reliable figures specifically on shoplifting are available to date.

Shoplifting occurs in every socioeconomic and demographic group (Guffey *et al.*, 1979) and distinctively among teenagers. Most arrests for shoplifting are teenagers (Murphy, 1986) who work in groups to conceal merchandise (Verrill, 1984). Shoplifting behaviour cannot be attributed to one factor in isolation but to a myriad of influences acting in combination (Tonglet, 2002). In their extensive review of the literature, Krasnovsky and Lane (1998) indicated that this particular market is under-researched. Also, Klemke (1992) pointed out, shoplifting has rarely caught the attention of researchers as a worthy social problem that needs to be investigated. The consequences of this stark oversight are well summarised by Forney *et al.* (2006), who concluded in their study that adolescent shoplifting is a gateway to chronic, multiple and delinquent criminal offences. Consequently, the present study explores the motivations informing such misbehaviour in an attempt to fulfil this identified knowledge gap in the literature.

Previous research have shown that this form of petty thievery can account for up to 40% of all stock losses a retailer suffers, and usually this loss is pushed on to the consumer through higher prices (Lin *et al.*, 1994). In an attempt to curb this

problem, retailers throughout the world have adopted sophisticated deterrence measures, from electronic surveillance cameras to security guards, mirrors, prosecution signs, locking up certain higher priced items, and employee training programmes to identify shoplifters (Lin *et al.*, 1994; Tonglet & Bamfield, 1997; Krasnovsky & Lane, 1998). Therefore, effective prevention of shoplifting is dependent on understanding firstly, the motives behind such acts and secondly, perceptions of anti-shoplifting strategies employed by retailers. Hence, this study also attempts to understand teenagers perceptions of deterrence techniques used in Mauritius.

Also, in assessing effectiveness of deterrence measures, an identification of the typical profile of shoplifters is necessary for prevention purposes. The literature describes shoplifters as having extremely varied backgrounds (Alberstat, 1989) and often do not conform to typical notions of what criminals should look like. Shoplifters tend to be from middle class rather than lower class families; they are relatively well educated, and are mostly amateur criminals than professionals especially when the motives of engaging in the act are related to sensation-seeking and peer pressure (Moore, 1983). Yet, other researchers claim that it is difficult to determine reliably characteristics of the typical shoplifter (Dabney *et al.*, 2004). Many studies exist portraying a somewhat confusing demographic and behavioural picture of the typical shoplifter (Cox *et al.*, 1990; Klemke, 1992; Buckle & Farrington, 1994; Farrington, 1999). Thus, another objective of this study is to determine the extent to which gender and age differentiate between shoplifters and honest teenagers. Hence, in summary, the **three** main objectives of this study are as follows:

- To identify the motivation factors for shoplifting among teenagers in Mauritius.
- To assess teenagers' perceptions of deterrence measures used in retail stores of Mauritius
- To determine whether demographic variables such as age and gender discriminate between shoplifter and honest consumers.

Next, the literature on teenage shoplifting is reviewed followed by the methodology employed. Thereafter, the findings are described. Subsequently, the ensuing discussion highlights the major theoretical and practical implications of this study. Finally the paper concludes with limitations and potential areas of future research.

### TEENAGE SHOPLIFTING MOTIVATIONS

Various authors have sought to identify the motives for shoplifting through self-report studies (Klemke, 1982; Kallis & Vanier, 1985) and the findings showed mainly economic, social and personal factors as determinants of shoplifting behaviour. Almost all studies report sensation seeking and peer influence as significant motivators. As early as 1966, Chambliss found that 43% of respondents surveyed in his study gave expressive explanations pertaining to excitement and risk taking associated with shoplifting. El-Dirghami (1974) reported that all students surveyed in his study found shoplifting an exciting thing to do. Klemke

(1982) and Fullerton and Punj (1993) described how consumers seek thrilling experiences out of shoplifting. It has been reported that juveniles felt ‘kicks’ from shoplifting and this was a more significant driver of shoplifting than the need for money (Cox *et al.*, 1990). Similarly, Lo (1994) concluded that socialisation processes emphasising the enjoyment and pursuit of fun and thrill are likely to affect teenagers’ tendency to shoplift and surprisingly was not related to their socio-economic background. Therefore, there is sufficient evidence in the literature on the ‘experience’ and ‘thrill’ factor involved in shoplifting.

From a consumer behaviour perspective, perhaps the most prominent study on shoplifting motivations among teenagers is that of Cox *et al.* (1990). Through factor analysis, these authors found four motivational factors namely, 'Experiential Factors', 'Social Factors', 'Contraband Factors' and 'Economic Factors', adequately explaining shoplifting motives. The first factor referred to as ‘Experiential’ factor was based on statements depicting attraction of teenagers to novelty or risk of the experience. The statements loading on the second factor labelled as ‘Social factors’ were related to peer pressure from friends. This notion that adolescents shoplift in response to peer pressure has been confirmed in other studies (Johnson, 1979; Moore, 1983). Moschis *et al.* (1986) found that increased frequency of communication with peers about shoplifting related positively and significantly to adolescents’ favourable attitudes towards shoplifting and the frequency of it. Cox *et al.* (1993) found that teenagers who interacted with friends who shoplifted, were more likely to be involved in shoplifting. Cox *et al.* (1990) found that shoplifters themselves were significantly less likely to feel that peer pressure was an important influence on their behaviour. By far, these studies reinforce peer pressure as a complex and motivating factor in adolescent shoplifting.

The third motivation factor namely ‘Contraband Factors’ in Cox *et al.*’s (1990) study referred to the desire of teenagers for forbidden products such as cigarettes and sex book, which reflected the need for product acquisition. In fact, all items depicting this motive were related to products that teenagers were told they ‘cannot have’, ‘can’t legally buy’ or ‘embarrassed to buy’. The last factor known as Economic Factors’ dealt with desire for items that teenagers did not want to pay for. This factor reflected the same broad economic reasons for shoplifting that many other authors have found (Chambliss, 1966; Kraut, 1976; Klemke, 1982) and as pointed out by Kraut (1976), college age shoplifters view this misbehaviour as simply the ultimate ‘bargain’. Based on these findings the authors proposed a classification typology of shoplifters’ motivations.

However, other authors such as Tonglet (2002) found that the decision to shoplift was also related to opportunities for shoplifting, social factors and perceptions of low risks of apprehension. Poverty, retaliation against parents and self-indulgence can also be likely motivators (Klemke, 1982; Moore, 1983) Thus, from the review above, it is clear that there are various motives for shoplifting but not all of them have the same influence on teenagers. Hence, it can be argued that the demographic and psychographic profiles of teenagers, their moral attitudes and perceptions of risk levels associated with this deviant behaviour can effectively distinguish between shoplifters and non-shoplifters. However, the focus of the

present study is limited to only two demographic variables namely, age and gender as discriminators.

### **INFLUENCE OF AGE & GENDER ON SHOPLIFTING**

The relationship between gender and shoplifting has been the subject of intense academic debate with no clear profiling due to the complexity associated with the different types of products shoplifted by males and females. A popular stereotype is that females are more involved in shoplifting than males (Klemke, 1992). However, many studies have shown that males tend to commit a higher level of shoplifting (Cox *et al.*, 1990) but some controversies exist in particular with regards to clothing outlets where female dominated shoplifting prevails (Lin *et al.*, 1994). Buckle and Farrington (1994) and Tonglet (2002) are of the view that males were more likely to shoplift across product categories. Nevertheless, the social influence process leading to shoplifting can be quite similar between males and females (Cox *et al.*, 1993). Female shoplifters may be motivated more by psychological factors to engage in this activity (Krasnovsky & Lane, 1998). Likewise, Cox *et al.* (1990) reported that females were more likely to engage in shoplifting for social reasons pertaining to peer pressure while males were more driven by the experiential motive.

Contrary to these beliefs, McShane *et al.* (1991) indicated that income and social isolation played a significant role in discriminating shoplifters from non-shoplifters but gender had no influence whatsoever on differentiating between the two groups. Similarly, Dabney *et al.* (2004) posit that the lack of a direct relationship between gender, race and shoplifting runs counter to the stereotypical assumptions underlying commonly held profiling strategies. Therefore, it is difficult to conclude whether males or females are more likely to shoplift, and if they do, what are the product categories they target. This study will seek to provide some illuminations on this issue.

Relatedly, there is a high degree of consensus in the literature that individuals under the age of 20 are most likely to be apprehended for shoplifting (Kraut, 1976; Klemke, 1992) and that shoplifting behaviour 'peaks' during middle adolescence (Krasnovsky & Lane, 1998). For example, self-report data showed that 30 to 40% of adolescents indulge in shoplifting repeatedly (Cox *et al.*, 1990) but as these adolescents mature, the incidence rate decreases (Klemke, 1978). Cox *et al.* (1990) found that younger shoplifters were more motivated because certain products were forbidden to them while Marcia (1967) suggested that this occurrence was higher among teenagers because adolescence is a phase where the unquestioning acceptance of parents' ideology is rejected and there is an attempt to forge an ideology of their own. In this process, the resulting confusion and conflict may make teenagers more inclined to experiment with such deviant behaviour. Hence, these studies suggest that shoplifting is due to level of maturation and adolescents may simply grow out of shoplifting as they enter adulthood (Kraut, 1976; Klemke, 1982; Cox *et al.*, 1990).

## **DETERRENCE MEASURES USED BY RETAILERS**

Shoplifting is a major concern for retailers. For example, past studies showed that as many as 60% of consumers have shoplifted at some time in their lives (Cox *et al.*, 1990) and shoplifting incidents have increased by 300% in the last 20 years (Klemke, 1992). In some countries, the phenomenon has become a sub-culture, particularly among adolescents. With these figures painting a bleak picture for retailers, many have resorted to the most expensive and sophisticated deterrence techniques. Examples of detection and prevention strategies abound in the literature, but the most prominent features have been the use of CCTV, security guards, mirrors, prosecution signs, locking up certain higher priced items, and employee training programmes to identify shoplifters (Lin *et al.*, 1994; Tonglet & Bamfield, 1997; Krasnovsky & Lane, 1998). Others, including Lin *et al.* (1994) reported measures such as placing registers in the middle of the store act as effective deterrents.

The literature suggests two approaches to reducing shoplifting: 'recovery method' (trying to apprehend shoplifters after they have committed the crime) and 'preventive method' (discourage the behaviour). The latter has become the favoured approach as it is more cost effective in the long run (Dickerson, 1979). Some retailers have embarked on media and school campaigns to discourage shoplifting by adolescents (Cox *et al.*, 1990). Retailers' associations in the US have also adopted this prevention stance by running seminars for retailers to accentuate on how shoplifting opportunities are enhanced when the retail environment is characterised by open displays, liberal return policies, easily switchable price tags, and perceived weak deterrence measures. Also, effective deterrent measures may have a counterproductive, boomerang effect upon well behaved consumers if they feel harassed (Fullerton & Punj, 1997b). Retailers report that high- tech prevention equipments can scare customers away and in some cases the devices used are an expensive way to provide a false sense of security. In many situations the devices do not work or shoplifters have figured a way around them (Lin *et al.*, 1994). Klemke (1978) found no significant relationship between being apprehended for shoplifting and perceptions of the deterrence effect of anti shoplifting devices, which is consistent with the evidence that a substantial number of apprehended youths continue to shoplifting repeatedly after their first arrest. This is because as retailers become increasingly large and impersonal institutions, and the continuing growth of national chains at the expense of local, family-owned stores, these trends may facilitate guilt free consumer theft (Cox *et al.*, 1990). Nonetheless, the old adage of 'prevention is better than cure' remains the motto of many retailers who continuously invest in anti shoplifting devices.

Furthermore, the literature emphasises the use of public education as an effective prevention tool. Public education aims at changing attitude and hopefully behaviour of targeted groups. Education has been through examples portraying shoplifters as repulsive and sick people, and rehabilitating shoplifters. This may reinforce consumers' existing sense of moral propriety and thus strengthen moral constraints against misbehaviour (Fullerton & Punj, 1997b). Contrary to this view, education or not, shoplifters find it hard to abstain from such a thrill. Strong peer

influence among groups of teenage consumers stimulates misconduct. Education would have to counter deeply held group values, and such an approach is bound to fail as suggested by Kallis and Vanier (1985). Therefore, of the two general avenues proposed, a combination of deterrence and education appears to offer the most promise, particularly in moderating misconduct (Fullerton & Punj, 1997b).

### METHODOLOGY

The survey instrument consisted of questions pertaining to demographic and socio-economic backgrounds of respondents, motives for shoplifting, product categories shoplifted, and perceptions of deterrence measures. This study was part of a broader research project undertaken by the University of Mauritius in collaboration with the University of Kwa-Zulu Natal in South Africa. The survey instrument was similar to that used in South Africa with slight modifications to fit the local context. Hence, a mixed methodology approach was preferred for this study in order to customise the questionnaire. A priori 10 in-depth interviews were carried out with retailers to identify the most commonly shoplifted product categories and items. These interviews lasted on average 45 minutes and also included open ended questions pertaining to perceptions of security in their own stores and their general views about shoplifting. Content analysis of these interviews revealed that items of smaller value were most often shoplifted and that shoplifting was more problematic for corner shops than supermarkets and hypermarkets. The problem was particularly rife especially over the festive seasons among individuals or associations that owned stalls in flea markets. Supermarket and hypermarket managers/owners were confident about the effectiveness of their deterrence measures and mentioned that shoplifting happened only occasionally. Based upon the feedback from these interviews, the questionnaire was amended accordingly and pre-tested among 20 students enrolled at the University of Mauritius.

It was deemed appropriate to use third person techniques in wording the questions so that respondents would not reveal self-incriminating information. This technique is recommended by Fisher and Tellis (1998) especially when investigating socially sensitive topics such as shoplifting. All items pertaining to each question were derived from the literature (see Klemke, 1982; Kallis & Vanier, 1985; Cox *et al.*, 1990; Lo, 1994; Tonglet, 2002). A five point likert scale was used throughout the questionnaire to capture respondents' perceptions and attitudes. Shoplifting motives were measured using 30 statements anchored on 1='strongly disagree' to 5='strongly agree'. Perceptions of deterrence measures were captured on a scale ranging from 1='very ineffective' to 5='very effective'. Shoplifting behaviour was measured by asking respondents how often they took 12 product categories from a store without paying for it ('never', 'rarely', 'sometimes', 'often', and 'very often').

Respondents for this study were drawn from the general population of teenagers enrolled in secondary and tertiary education of Mauritius. This setting suggests that the target population would appear to be educated and from households with an average level of income, for whom stealing of necessities would not be a likely motivator. Similar to the study of Tonglet (2002), age group for students to be included in the sample was defined as those between the ages of 13 to 19 years old.

Parental consent was obtained for the sample of respondents aged between 13-17 years . A convenience sample of 400 students was targeted at the University of Mauritius and shopping malls, given that these sampling points provided an adequate sampling frame in terms of teenage demographic and sampling characteristics. Self-completed questionnaires were distributed to only first year students on campus and trained students distributed the same questionnaire to adolescents in various shopping malls in Mauritius. The questionnaire was offered to whoever agreed to complete them and the limitations of this approach are discussed in the final section. The self report method was deemed to be the most appropriate as suggested in other studies (Kallis & Vanier, 1985; Klemke, 1992). Data collection lasted for a period of three months.

### **DATA ANALYSIS**

The data were analysed using four techniques namely factor analysis, chi-square tests of associations, Pearson’s correlation coefficients and discriminant analysis. Factor analysis using a VARIMAX procedure was employed to reduce shoplifting motives to a more manageable set of factors. Relationships between age, gender and shoplifting were explored using Chi-Square tests while correlation coefficients were used to identify which motives led to what product categories being stolen. Discriminant analysis was used to identify which motives and demographic variables could discriminate significantly between shoplifters and non-shoplifters in the sample.

### **EMPIRICAL SURVEY FINDINGS**

#### ***Demographic Profile of Respondents***

Complete data were available on 238 teenagers, a response rate of 59.5% (calculated on the basis of number of teenagers approached=400), which is comparable to other studies using similar methodologies (Tonglet, 2002; Forney *et al.*, 2006). The demographic profile of the sample is shown in Table 1. The survey polled more females (55.9%) than males (44.1%). The average age of the sample was 16.5 years old. Younger teens were defined as respondents of between ages of 13 to 16 years old, and older teens were those between ages of 17 to 19 years old. As can be seen in Table 1, the survey polled more ‘older’ teens (55.9%) as expected. The majority of teenagers were enrolled in Form IV (18.1%) at school, followed by Upper VI (17.6%) and Form III (16.8%).

<b>Sample Characteristics (N = 238)</b>			
<b>Demographics</b>		<b>Frequency</b>	<b>%</b>
<b>Gender</b>	Male	105	44.1
	Female	133	55.9
<b>Age</b>	Younger teen	105	44.1
	Older teen	133	55.9
<b>Education Level</b>	FormII	5	2.1
	FormIII	40	16.8
	FormIV	43	18.1
	FormV	37	15.5
	LowerVI	38	16.0
	UpperVI	42	17.6
	Uniyrl	33	13.9

**Table 1:** Demographic profile of sample

Teenagers were asked to indicate whether they shoplifted any products from a list of items from a retail store without paying for it in the last year. Based on Table 2, the results showed that all product categories have been the target of shoplifting. The sample was then categorized into non-shoplifters and shoplifters (shoplifted at least once). Of teenagers, 46.2% claimed to have shoplifted before. A Chi-square test of association revealed a significant relationship between gender and shoplifting ( $p < 0.01$ , Cramer's  $V = 0.247$ ), males (67.6%) shoplifted more in this sample compared to females (42.9%). No significant relationship was found between younger teen/older teen and shoplifting. Of teenagers who claimed to have shoplifted before, the most popular product categories taken were confectioneries (21.4%), school supplies (13%) and books/magazines (11.3%) as shown in Table 2. Cross tabulations of product categories and gender revealed a number of important relationships between the two variables. Males were more likely to shoplift music items ( $p = 0.007$ ), books/magazines ( $p = 0.017$ ), toys ( $p = 0.010$ ), cigarettes ( $p = 0.044$ ). However, Cramer's  $V$  for all these variables indicated a potentially weaker association between them.

<b>Product Categories</b>	<b>Never %</b>	<b>Rarely %</b>	<b>Sometimes %</b>	<b>Often %</b>	<b>Very Often %</b>
Confectioneries (sweets, chocolates, chewing gums)	54.6	<b>21.4</b>	13.9	5.9	4.2
Music (records, tapes, CDs)	86.6	5.5	5.5	1.7	0.8
Sports Equipment	91.6	2.5	3.8	0.4	1.3
Clothing (shoes, accessories)	87.4	7.6	2.5	2.1	0.4
Health Items (shampoo, cologne, make-up)	87.4	8.0	2.5	1.3	0.8
School Supplies	74.8	<b>13.0</b>	7.1	3.4	1.7
Books & Magazines	80.7	<b>11.3</b>	4.6	1.7	1.7
Toys	87.4	7.6	2.5	1.3	1.3
Alcohol	93.3	2.1	2.5	1.3	0.8
Cigarettes	89.9	4.6	2.9	2.1	0.4
Mobile Phones (SIM cards, prepaid cards)	92.4	3.4	1.3	1.7	0.8
Jewellery	92.9	2.1	2.1	2.1	0.8

**Table 2:** Product categories shoplifted

### **IDENTIFICATION OF SHOPLIFTING MOTIVES**

In light of the above findings, factor analysis was used to identify underlying motivation factors. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.852, which showed the adequateness of the data set for factor analysis (Kaiser, 1974). The Bartlett's test of sphericity reached statistical significance ( $\chi^2 = 2776.25$ ,  $p < 0.001$ ), supporting the factorability of the correlation matrix. The 30 motivation items were factor analysed using a principal component analysis with orthogonal VARIMAX rotation. Only factors with eigenvalues equal to or greater than one were chosen for interpretation. This study adopts a criteria of 0.4 and above as being the minimum contribution level of an item to a factor. As it can be seen from Table 3, the final rotated solution comprised of eight factors explaining a total of 64.73% of the variance in the data. Only significant factor loadings are shown.

The first factor reflects the social motives of shoplifting. All items pertaining to the influence of friends, that is, peer pressure on their aberrant behaviour. This factor explained 11.3% of total variance (Table 3). The second factor identified all motives that related to teenagers having negative perceptions of retailers in general. This factor suggested that adolescents felt that retail stores cheated customers, made huge profits, and over priced items, which provided justification for shoplifting. This factor contributed 9.8 % to total explained variance. The third factor reflected perceptions of an experiential reason for shoplifting, which included items relating to shoplifting being fun, exciting and trying it to see what it is like. The fourth factor explained 8.8% of variance and was related to teenagers' perceptions that retail stores offered an environment conducive to shoplifting with

lax security measures and retail stores would not feel these losses as they charged high prices. Shoplifters perceived that the stolen items will not be missed by the store and that it is easy to shoplift in such an environment. As shown in Table 3, factor five referred to purely economic motives for shoplifting. Teenagers would engage in shoplifting because they did not want to pay for the items, or they wanted the item without paying so they could resell to others. They would also shoplift items because they knew they could get away with it. Factor six captured the desire for forbidden products by teenagers and was labelled 'contraband' factor. This factor included motives for shoplifting that related to teenagers being embarrassed to buy certain items or because they were not given permission to buy these items.

<b>Factors and items</b>	<b>Factor Loading</b>	<b>Eigen values</b>	<b>% of Explained Variance</b>	<b>Cronbach's Alpha</b>
<b>Factor 1: Social Motives</b>		3.270	11.275	0.8614
Shoplift because friends are doing it	0.728			
Shoplift because friends dare to do it	0.764			
Shoplift to please their friends	0.811			
Shoplift because friends want them to steal	0.719			
Shoplift because they are told they can't have the item	0.441			
Shoplift because they can't have it legally	0.438			
<b>Factor 2: Negative Perceptions of Retailers Motives</b>		2.860	9.862	0.7702
Shoplift because they feel stores cheat customers	0.563			
Shoplift because retailers make huge profits	0.787			
Shoplift because they are angry with the store	0.757			
Shoplift because stores overprice products	0.698			
<b>Factor 3: Experiential Motives 1</b>		2.620	9.035	0.8421
Shoplift just for fun	0.773			
Shoplift to see what it is like	0.833			
Shoplift for excitement	0.768			
<b>Factor 4: Negative Perceptions of Retail Store Environment Motives</b>		2.573	8.874	0.7397
Shoplift because items will not be missed by store	0.439			
Shoplift because stores charge higher prices	0.495			
Shoplift because stores have lax security measures	0.739			
Shoplift because stores would not feel the loss	0.643			
Shoplift because it is easy	0.626			
<b>Factor 5: Economic Motives 1</b>		2.196	7.572	0.7216
Shoplift because they do not want to pay for it	0.669			
Shoplift because they want items without paying to sell to others	0.691			
Shoplift because they could get away with it	0.714			
<b>Factor 6: Contraband Motives</b>		1.974	6.808	0.7027
Shoplift because they might be too embarrassed to buy the item	0.736			
Shoplift because they are given no permission to buy the item	0.818			
<b>Factor 7: Experiential Motives 2</b>		1.842	6.352	0.6473
Shoplift because they see it as a challenge	0.587			
Shoplift because they like it	0.593			
Shoplift because everyone does it	0.590			
<b>Factor 8: Economic Motives 2</b>		1.438	4.958	0.5285
Shoplift because they need an item badly	0.847			
Shoplift because friends need an item	0.478			
Total Variance Explained (%)			64.73	

**Table 3:** Factor analysis on motives for shoplifting

Factor seven related again to the experiential nature of shoplifting for teenagers. This factor was different from factor three in that shoplifting motives loading on

this factor related more to 'others' doing it so that they found it challenging to emulate others. They also perceived that everyone did it and they would like the experience of it. Factor eight captured the other economic motives for shoplifting. This factor was different from factor five in that the items loading on this factor pertained more to teenagers needing an item badly or that their friends needed an item. Consequently, they would shoplift to fulfil those needs. In order to assess the reliability and internal consistency of each derived factor, Cronbach's Alpha was computed. As can be seen in Table 3, most of the factors showed acceptable reliability coefficients except for factors seven and eight.

Gender and age had no significant effect on perceived motives for shoplifting. However, a comparison of shoplifters and non-shoplifters on shoplifting motives revealed a significant difference on the experiential motive ( $t = -2.334$ ,  $p < 0.05$ ). Shoplifters tend to place a higher emphasis on the experiential reasons for committing such an act than do non-shoplifters.

Product Categories Stolen	Number of respondents shoplifting product	Correlation					
		Social	Negative Retailer Perceptions	Experiential	Retail Environment	Economic	Contraband
Confectioneries	108	0.082	0.015	0.209**	0.097	-0.094	0.129
Music	32	0.120	0.083	0.165*	0.09	-0.157*	-0.056
Sports equipment	19	0.093	0.037	0.147*	-0.053	-0.072	-0.079
Clothing & accessories	30	0.016	0.054	0.105	0.031	-0.016	-0.046
Health items	30	0.027	-0.140*	0.086	0.110	-0.100	0.062
School supplies	60	0.063	0.137*	-0.013	0.115	-0.093	0.016
Books & magazines	46	0.067	0.084	-0.003	0.063	-0.206**	-0.059
Toys	30	0.057	0.058	-0.032	0.097	-0.167**	-0.012
Alcohol	16	0.073	0.052	-0.099	-0.049	-0.208**	0.169*
Cigarettes	24	0.056	-0.03	0.051	0.067	-0.129	0.252**
Mobile phones	17	0.051	0.116	-0.066	0.046	-0.135*	0.045
Jewellery	17	-	-0.111	0.122	0.129	-0.153*	0.198**
* $p < 0.05$ , ** $p < 0.01$							

**Table 4:** Shoplifted products correlated with shoplifting motivations

Some interesting relationships could be identified between shoplifters' motives behind such acts and the types of product they stole. As shown in Table 4, the 'Experiential Motives' drove the shoplifting of confectioneries, music items, and sports equipment. Negative perceptions of retailers particularly led teenagers' to shoplifting items such as school supplies and health items. 'Economic' oriented shoplifters showed a consistent pattern of shoplifting more expensive product categories than experiential driven ones. These findings are similar to the study of Cox *et al.* (1990), and can be explained by the fact that these teenagers needed the items (music, books/magazines, toys, alcohol, mobile phones, and jewellery) but

did not want to pay for it or wanted to resell. Hence, the products shoplifted were of higher value. 'Contraband' oriented shoplifters were more likely to steal alcohol, cigarettes and jewellery, which could be explained by the fact that these products may be forbidden to them specifically in the school environment.

### PERCEPTIONS OF DETERRENCE MEASURES

Next, teenagers' perceptions of the effectiveness of deterrence measures were assessed. As shown in Table 5, the majority of deterrence techniques are perceived as either very effective or effective except for 'discontinue self-service', 'search by security guards', 'automatic prosecution' and 'checkers in dressing rooms' which teenagers were unsure about their effectiveness. The most effective techniques were 'cameras in store' and 'punish shoplifters', both with mode of 5. Chi-square tests of associations revealed no significant differences between gender and perceptions of effectiveness of deterrence measures.

Deterrence Measures	Mode	Very Ineffective %	Ineffective %	Unsure %	Effective %	Very Effective %
security guards	4	6.7	8.8	17.6	44.1	22.7
cameras in store	5	4.6	2.1	3.8	34.5	55.0
two way mirrors	4	6.3	8.8	23.5	31.1	30.3
store personnel	4	3.8	11.8	25.6	40.8	18.1
price tags buzz	4	8.0	6.3	19.8	32.9	32.9
locking up merchandise	4	9.2	18.1	25.6	30.3	16.8
punish shoplifters	5	5.9	7.1	15.5	32.4	39.1
CCTV	4	4.6	5.5	23.9	46.2	19.7
use notices for prosecution	4	4.6	14.3	25.6	36.1	18.9
discontinue self service	3	26.9	23.5	29.8	14.3	5.5
security guards search	3	16.8	24.8	25.2	23.9	9.2
electronic alarms on products	4	12.2	11.3	15.5	36.1	24.8
undercover security guards	4	5.9	10.9	30.3	38.2	14.3
automatic prosecution	3	9.7	18.5	31.5	27.7	12.2
compulsory checking of coats	4	15.1	23.5	25.6	27.3	8.4
checkers in dressing rooms	3	17.2	21.4	28.6	25.2	7.6
observation towers	4	7.1	9.7	31.1	38.7	13.4

*Table 5: Perceptions of effectiveness of deterrence measures*

Significant relationships were found between the class that teenagers were enrolled in and perceptions of deterrence measures. For example, students enrolled in Form III, IV, V rated on average security guards as more ineffective compared to those enrolled in Lower VI, Upper VI and University ( $p=0.018$ , Cramer's  $V=0.207$ ). Teenagers enrolled in lower forms perceived cameras in store to be on average 'very effective' compared to those enrolled in higher forms that rated the same deterrence measure as effective ( $p=0.021$ , Cramer's  $V=0.205$ ). There were also significant relationships between class enrolled in and perceptions of effectiveness

of prosecution notices ( $p=0.04$ , Cramer's  $V=0.199$ ) and automatic prosecution ( $p=0.027$ , Cramer's  $V=0.203$ ). Students enrolled in higher classes rated on average these two deterrence technique as being rather ineffective compared to those enrolled in lower classes. These findings were somewhat reinforced by the existence of a significant relationship between age and perceptions of effectiveness of deterrence measures. Younger teens were more sceptical about the effectiveness of security guards as a preventive measure against shoplifting compared to older teens ( $p=0.007$ , Cramer's  $V=0.243$ ). Furthermore, shoplifters and non-shoplifters were contrasted on perceptions of deterrence measures to identify any significant relationships. Indeed, more non-shoplifters rated 'cameras in store' as a very effective measure of deterrence compared to shoplifters ( $p=0.012$ , Cramer's  $V=0.233$ ). More non-shoplifters rated 'security guards search of customers' as ineffective compared to shoplifters ( $p=0.022$ , Cramer's  $V=0.219$ ).

### DISCRIMINANT ANALYSIS

Finally, a discriminant function was estimated to compare shoplifters and non-shoplifters. The variables included in the model specification were age, gender, form enrolled in, motives behind shoplifting and perceptions of deterrence measures. A stepwise approach led to a discriminant function with five significant independent variables (experiential motives, retail store environment, gender, CCTV, and discontinuation of self-service). The overall model was significant (Wilk's Lambda =0.839,  $\chi^2 =38.092$ ,  $p<0.01$ ). An examination of standardised coefficients, suggest that the experiential motive is the most important predictor in discriminating between the groups followed by perceptions of the retail store environment. The model correctly classified 68.1% of respondents, which is similar to the classification score reported in Cox *et al.* (1990).

### DISCUSSION & MANAGERIAL IMPLICATIONS

Several implications can be drawn from the results of this study. Most important of all is that despite retailers indicating that shoplifting happens occasionally, teenagers tend to claim otherwise. Almost 46% of the sample claimed to have shoplifted previously with a high incidence rate for product categories such as confectioneries, school supplies and books/magazines. A similar pattern was identified in the study of Cox *et al.* (1990), while others showed that these product categories accounted for almost all adolescent shoplifting (May, 1978). Unlike the study of Klemke (1992), which reported a higher prevalence of shoplifting among females, this study reports more males shoplifting in comparison, which conform to findings of authors such as Kraut (1976), Buckle and Farrington (1994), and Tonglet (2002). However, age was not a significant predictor of whether a teenager was likely to be a shoplifter. Other studies (Cameron, 1964; Klemke, 1978, 1992; Cox *et al.*, 1990) have shown that younger high school students are more involved in shoplifting than older students (Klemke, 1978) or that shoplifting involvement decreases as teenagers mature (Cox *et al.*, 1990). Surprisingly, gender was a significant discriminator between shoplifters and non-shoplifters in Mauritius. This is in stark contrast to findings from Dabney *et al.* (2004) and McShane and Noonan (1993) who concluded that there was a lack of a direct relationship between gender and shoplifting. The evidence from this study can be explained by the fact that

societal views of females committing deviant acts are seen as ‘sick’ in Mauritian society, while males committing similar acts are seen as ‘bad’ or ‘wild’. Also, males generally showed a greater tendency to bend and break rules as compared to females.

The findings indicated that social motives, negative perceptions towards retailers and experiential motives were the driving force behind this disturbing phenomenon of shoplifting. These results are similar to previous studies to some extent. For example, the social motive for shoplifting which incorporates peer pressure has been reported in other studies (Cox *et al.*, 1990; Lo, 1994) as well as the experiential motives (El-Dirghami, 1974; Klemke, 1982; Cox *et al.*, 1990; Lo, 1994). The latter motives seem to be a stronger driver of shoplifting in comparison to other studies given that it was the strongest discriminator between shoplifters and non-shoplifters. The applied epidemiological knowledge base on threshold effects in social networking (including peer influence) also helps to explain these motives and the differences identified between shoplifters and non-shoplifters. The economic motives were somewhat undermined in importance among teenagers in Mauritius as compared to reported findings elsewhere from developed countries. This can be explained by the fact that among African countries, Mauritius has one of the highest income per capita, which therefore attenuates economic reasons for stealing. This argument corroborates with the findings of Klemke (1982) that poverty tends to exacerbate shoplifting.

Of more interest are the motives pertaining to negative attitudes towards retailers and the retail environment itself. These motives have not been reported elsewhere but the implications are far reaching. This vindictive attitude stems from teenagers’ beliefs that retail stores cheat customers, make huge profits, overprice products and previous bad experiences with retailers justify their shoplifting. Consequently, this attitude has a negative impact on future behavioural intentions such as store loyalty, customer satisfaction and willingness to recommend. Previous studies (Oliver, 1980; Anderson & Sullivan, 1993; Cronin *et al.*, 2000) have also shown the link between customer dis/satisfaction and long term profitability, and retailers need to find ways to overcome negative perceptions about their stores to remain profitable.

In a similar vein, another motive for shoplifting is teenagers’ perceptions that retail stores have lax security measures, which provide the opportunities for engaging in it. A number of authors (Cole, 1989; Nettler, 1989) have reported that even honest customers are tempted to steal when they perceive that there is a small chance of being caught and punished. The modern self-service retail system encourages customers to handle merchandise, which provides shoplifting opportunities. For example, Stone (1954) established that consumers felt less protective of national chains compared to individual/family owned stores, which could explain why teenagers steal given their belief that these products would not be missed by the stores or the latter would not feel the losses. Retail stores have become faceless making shoplifters feel that there is no specific victim for their crime (Baumer & Rosenbaum, 1984). This particular motive was also of significance in differentiating shoplifters from honest consumers.

Moreover, deterrence measures are the most widely form of control techniques today (Fullerton & Punj, 1997b). The goal is to create formal and informal sanctions which increase the perceived probability that shoplifting will be both detected and punished (Kraut, 1976). The findings of this study report that most deterrence measures are effective, which might explain the dominance of 'experiential' motives over 'economic' motives for shoplifting. Teenagers want to try because they think it is exciting, fun or just to see what it is like. However, the findings suggest that younger teens and older teens have different perceptions of the effectiveness of specific deterrence measures. Also, CCTV and discontinuation of self service were significant discriminators between shoplifters and honest teenagers. Non-shoplifters believed that CCTV was a very effective measure, while shoplifters thought that discontinuation of self-service would not be an effective deterrence measure. However, it has been found that the use of control techniques can make the shopping experience of honest customers more unpleasant (Tonglet, 2002). Therefore, the use of control measures should be balanced against perceptions of the retail experience by honest consumers. However, using an educational approach combined with deterrence measures can be a sensible solution to the problem. For example, the use of promotional messages to persuade teenagers to unlearn patterns of misbehaviour and to strengthen moral constraints that inhibit shoplifting combined with morality classes at schools in Mauritius, can be used as part of the educational approach. Advertisements showing the consequences of shoplifting for teenagers and the effectiveness of deterrence measures can help curb the problem. Public education can also be used to sensitise the general population and reinforce consumers existing sense of moral propriety on the consequences of this aberrant behaviour for the individual, the family, the school and the community as a whole.

### **CONCLUSIONS & DIRECTIONS FOR FUTURE RESEARCH**

On a concluding note, several limitations of this study are worth mentioning. In turn, these provide avenues for further research. First, the use of a convenience sample and the size of the sample are notable limitations. A larger sample of adolescents with or without shoplifting involvement, and the use of probability methods of selecting samples would broaden the generalisations that could be made from this study. Second, involvement of teenagers in shoplifting might be an exaggeration due to the self-completion format used for data collection. Yet, as the experiential and social motives suggest, the temptation to engage in such an activity is omnipresent. Third, only a few demographic information was collected, which might have limited the real influence of demographics on differentiating between shoplifters and non-shoplifters. All these limitations provide areas for future research in terms of the influence of ethnicity, social class, income levels, and morality levels on shoplifting attitudes, beliefs and intentions. The knowledge base on threshold effects in social networking with relevance to peer influence can be explored further. Different approaches using neurobiological, developmental or psychological, and other social theories can be used to investigate shoplifting behaviour in future studies. Other avenues of research would include qualitative studies on the behaviour, inclusion of retailers' perceptions of shoplifting

behaviour, and investigating the problem in non-traditional retailing formats such as flea markets.

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